



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2014-0491; Directorate Identifier 2014-NM-023-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), and CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes. This proposed AD was prompted by a determination that the forward lugs of the flap hinge box might not conform to engineering drawings, which could result in premature fatigue cracking. This proposed AD would require revising the maintenance or inspection program to include new airworthiness limitations tasks; and measuring the forward lug edge distance of each flap hinge box, and inspecting for cracking and damage (i.e., deformation or bearing failure) of the forward lug edge of each flap hinge box, and repair if necessary. We are proposing this AD to detect and correct non-conforming flap hinge box forward lugs, which could result in failure of the lugs and detachment of the flap hinge box and consequent detachment of the flap surface.

**DATES:** We must receive comments on this proposed AD by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0491; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal

holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Ricardo Garcia, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7331; fax 516-794-5531.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA-2014-0491; Directorate Identifier 2014-NM-023-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

## **Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2014-01, dated January 3, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

The aeroplane manufacturer has determined that the flap hinge box forward lugs edge distance may not conform to the engineering drawings. Non-conforming flap hinge box forward lugs may result in premature fatigue cracking.

Failure of the lugs could lead to the detachment of the flap hinge box and consequently the detachment of the flap surface. The loss of a flap surface could adversely affect the continued safe operation of the aeroplane.

This [Canadian] AD mandates the incorporation of new Time Limits/Maintenance Checks (TLMC) Airworthiness Limitations (AWL) tasks, and the measurement [and inspection for cracking and damage] of the forward lug edge distance of each flap hinge-box and rectification as required.

Corrective actions include repairing damage and cracking. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0491.

## **Relevant Service Information**

Bombardier has issued the following service information. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

- Bombardier Service Bulletin 600-0762, dated September 26, 2013 (for Model CL-600-1A11 airplanes).
- Bombardier Service Bulletin 601-0631, dated September 26, 2013 (for Models CL-600-2A12 and CL-600-2B16 airplanes).
- Bombardier Service Bulletin 604-57-007, dated September 26, 2013 (for Model CL-600-2B16 airplanes).
- Bombardier Service Bulletin 605-57-005, dated September 26, 2013 (for Model CL-600-2B16 airplanes).
- Canadair Challenger Temporary Revision 5-157, dated July 8, 2013, to Canadair Challenger Time Limits/Maintenance Checks Manual, PSP 605.
- Canadair Challenger Temporary Revision 5-158, dated July 8, 2013, to Canadair Challenger Time Limits/Maintenance Checks Manual, PSP 605.
- Canadair Challenger Temporary Revision 5-262, dated July 8, 2013, to Canadian Challenger Time Limits/Maintenance Checks Manual PSP 601.
- Canadair Challenger Temporary Revision 5-275, dated July 8, 2013, to Canadian Challenger Time Limits/Maintenance Checks Manual PSP 601A.
- Canadair Challenger Temporary Revision 5-276, dated July 8, 2013, to Canadian Challenger Time Limits/Maintenance Checks Manual PSP 601A.
- Tasks 57-50-00-121 and 57-52-01-102 of Section 5-10-30 of Part 2, “Airworthiness Limitations,” of Bombardier CL-605 Time Limits/Maintenance Checks Manual, Revision 8, dated July 8, 2013.

- Tasks 57-50-00-121 and 57-52-01-102 of Section 5-10-30 of Part 2, “Airworthiness Limitations,” of Bombardier CL-604 Time Limits/Maintenance Checks Manual, Revision 20, dated July 8, 2013.

#### **FAA’s Determination and Requirements of this Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type designs.

This AD requires revisions to certain operator maintenance documents to include new actions (e.g., inspections). Compliance with these actions is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (k) of this AD. The request should include a description of changes to the required actions that will ensure the continued damage tolerance of the affected structure.

#### **“Contacting the Manufacturer” Paragraph in this Proposed AD**

Since late 2006, we have included a standard paragraph titled “Airworthy Product” in all MCAI ADs in which the FAA develops an AD based on a foreign authority’s AD.

The MCAI or referenced service information in an FAA AD often directs the owner/operator to contact the manufacturer for corrective actions, such as a repair. Briefly, the Airworthy Product paragraph allowed owners/operators to use corrective actions provided by the manufacturer if those actions were FAA-approved. In addition, the paragraph stated that any actions approved by the State of Design Authority (or its delegated agent) are considered to be FAA-approved.

In an NPRM having Directorate Identifier 2012-NM-101-AD (78 FR 78285, December 26, 2013), we proposed to prevent the use of repairs that were not specifically developed to correct the unsafe condition, by requiring that the repair approval provided by the State of Design Authority or its delegated agent specifically refer to the FAA AD. This change was intended to clarify the method of compliance and to provide operators with better visibility of repairs that are specifically developed and approved to correct the unsafe condition. In addition, we proposed to change the phrase “its delegated agent” to include a design approval holder (DAH) with State of Design Authority design organization approval (DOA), as applicable, to refer to a DAH authorized to approve required repairs for the proposed AD.

One commenter to the NPRM having Directorate Identifier 2012-NM-101-AD (78 FR 78285, December 26, 2013) stated the following: “The proposed wording, being specific to repairs, eliminates the interpretation that Airbus messages are acceptable for approving minor deviations (corrective actions) needed during accomplishment of an AD mandated Airbus service bulletin.”

This comment has made the FAA aware that some operators have misunderstood or misinterpreted the Airworthy Product paragraph to allow the owner/operator to use messages provided by the manufacturer as approval of deviations during the accomplishment of an AD-mandated action. The Airworthy Product paragraph does not approve messages or other information provided by the manufacturer for deviations to the requirements of the AD-mandated actions. The Airworthy Product paragraph only addresses the requirement to contact the manufacturer for corrective actions for the identified unsafe condition and does not cover deviations from other AD requirements. However, deviations to AD-required actions are addressed in 14 CFR 39.17, and anyone may request the approval for an alternative method of compliance to the AD-required actions using the procedures found in 14 CFR 39.19.

To address this misunderstanding and misinterpretation of the Airworthy Product paragraph, we have changed the paragraph and retitled it “Contacting the Manufacturer.” This paragraph now clarifies that for any requirement in this proposed AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the FAA, TCCA, or Bombardier, Inc.’s TCCA Design Approval Organization (DAO).

The Contacting the Manufacturer paragraph also clarifies that, if approved by the DAO, the approval must include the DAO-authorized signature. The DAO signature indicates that the data and information contained in the document are TCCA-approved, which is also FAA-approved. Messages and other information provided by the manufacturer that do not contain the DAO-authorized signature approval are not TCCA-



approved, unless TCCA directly approves the manufacturer's message or other information.

This clarification does not remove flexibility previously afforded by the Airworthy Product paragraph. Consistent with long-standing FAA policy, such flexibility was never intended for required actions. This is also consistent with the recommendation of the Airworthiness Directive Implementation Aviation Rulemaking Committee to increase flexibility in complying with ADs by identifying those actions in manufacturers' service instructions that are "Required for Compliance" with ADs. We continue to work with manufacturers to implement this recommendation. But once we determine that an action is required, any deviation from the requirement must be approved as an alternative method of compliance.

### **Costs of Compliance**

We estimate that this proposed AD affects 105 airplanes of U.S. registry.

We also estimate that it would take about 45 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$401,625, or \$3,825 per product.

We have received no definitive data that would enable us to provide cost estimates for the cost of parts or on-condition actions specified in this proposed AD.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

“Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This proposed regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Bombardier, Inc.:** Docket No. FAA-2014-0491; Directorate Identifier 2014-NM-023-AD.

#### **(a) Comments Due Date**

We must receive comments by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to the airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category.

(1) Bombardier, Inc. Model CL-600-1A11 (CL-600) airplanes, serial numbers 1004 through 1085 inclusive.

(2) Bombardier, Inc. Model CL-600-2A12 (CL-601) airplanes, serial numbers 3001 through 3066 inclusive.

(3) Bombardier, Inc. Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes, serial numbers 5001 through 5194 inclusive.

(4) Bombardier, Inc. Model CL-600-2B16 (CL-604 Variants) airplanes; serial numbers 5301 through 5665 inclusive, and 5701 through 5953 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings.

**(e) Reason**

This AD was prompted by a determination that the flap hinge box forward lugs edge distance might not conform to engineering drawings, which could result in premature fatigue cracking. We are issuing this AD to detect and correct non-conforming flap hinge box forward lugs, which could result in failure of the lugs and detachment of the flap hinge box and consequent detachment of the flap surface.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Maintenance or Inspection Program Revision**

Within 60 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, by incorporating the applicable airworthiness limitation (AWL) tasks as specified in table 1 to paragraph (g) of this AD. The initial

compliance time for doing the task is at the applicable times specified in table 1 to paragraph (g) of this AD.

Note 1 to paragraph (g) of this AD: For the incorporation of tasks specified in the temporary revisions (TRs) specified in table 1 to paragraph (g) of this AD that are a part of the maintenance or inspection program revision required by paragraph (g) of this AD, such incorporation may be done by inserting a copy of the applicable TRs specified in table 1 to paragraph (g) of this AD into the applicable “time limits/maintenance checks” (TLMC) manuals specified in table 1 to paragraph (g) of this AD. When the applicable TRs specified in table 1 to paragraph (g) of this AD have been included in general revisions of the applicable TLMC manual specified in table 1 to paragraph (g) of this AD, the general revisions may be inserted in the applicable TLMC manual specified in table 1 to paragraph (g) of this AD.

**Table 1 to Paragraph (g) of this AD – Tasks**

<b>Affected Airplanes</b>	<b>Task Number</b>	<b>Canadair Service Information</b>	<b>Initial Compliance Time</b>
Model CL-600-1A11 (CL-600 Variant) airplanes with inboard flaps having greater than 7,400 total flight cycles but equal to or less than 14,850 total flight cycles as of the effective date of this AD	57-40-00-186	Canadair Challenger Temporary Revision (TR) 5-158, dated July 8, 2013, of the Canadair Challenger Time Limits/Maintenance Checks (TLMC) Manual, PSP 605	Within 500 flight cycles after the effective date of this AD, but not later than 15,100 total flight cycles
Model CL600-1A11 (CL-600 Variant) airplanes with inboard flaps having greater than 14,850 total flight cycles as of the effective date of this AD	57-40-00-186	Canadair Challenger TR 5-158, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 605	Within 250 flight cycles after the effective date of this AD
Model CL-600-1A11 (CL-600 Variant) airplanes with inboard flaps having equal to or less than 7,400 total flight cycles	57-40-00-186	Canadair Challenger TR 5-158, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 605	Before the accumulation of 7,900 total flight cycles
Model CL-600-1A11 (CL-600 Variant) airplanes with outboard flaps having greater than 7,500 total flight cycles, but equal to or less than 11,350 total flight cycles as of the effective date of this AD	57-40-00-160	Canadair Challenger TR 5-157, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 605	Within 500 flight cycles after the effective date of this AD, but no later than 11,600 total flight cycles

<b>Affected Airplanes</b>	<b>Task Number</b>	<b>Canadair Service Information</b>	<b>Initial Compliance Time</b>
Model CL-600-1A11 (CL-600 Variant) airplanes with outboard flaps having greater than 11,350 total flight cycles as of the effective date of this AD	57-40-00-160	Canadair Challenger TR 5-157, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 605	Within 250 flight cycles after the effective date of this AD
Model CL-600-1A11 (CL-600 Variant) airplanes with outboard flaps having equal to or less than 7,500 total flight cycles	57-40-00-160	Canadair Challenger TR 5-157, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 605	Before the accumulation of 8,000 total flight cycles
Model CL-600-2A12 (CL-601 Variant) airplanes with inboard flaps having greater than 7,400 total flight cycles, but equal to or less than 14,850 total flight cycles, as of the effective date of this AD	57-40-01-101	Canadair Challenger TR 5-262, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601-5	Within 500 flight cycles after the effective date of this AD, but no later than 15,100 total flight cycles
Model CL-600-2A12 (CL-601 Variant) airplanes with inboard flaps with greater than 14,850 total flight cycles as of the effective date of this AD	57-40-01-101	Canadair Challenger TR 5-262, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601-5	Within 250 flight cycles after the effective date of this AD
Model CL-600-2A12 (CL-601 Variant) airplanes with inboard flaps with equal to or less than 7,400 total flight cycles as of the effective date of this AD	57-40-01-101	Canadair Challenger TR 5-262, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601-5	Before the accumulation of 7,900 total flight cycles

<b>Affected Airplanes</b>	<b>Task Number</b>	<b>Canadair Service Information</b>	<b>Initial Compliance Time</b>
Model CL-600-2A12 (CL-601 Variant) airplanes with outboard flaps with greater than 7,500 total flight cycles but equal to or less than 11,350 total flight cycles as of the effective date of this AD	57-40-00-175	Canadair Challenger TR 5-262, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601-5	Within 500 flight cycles after the effective date of this AD, but not later than 11,600 total flight cycles
Model CL-600-2A12 (CL-601 Variant) airplanes with outboard flaps having greater than 11,350 total flight cycles as of the effective date of this AD	57-40-00-175	Canadair Challenger TR 5-262, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601-5	Within 250 flight cycles after the effective date of this AD
Model CL-600-2A12 (CL-601 Variant) airplanes with outboard flaps having equal to or less than 7,500 total flight cycles as of the effective date of this AD	57-40-00-175	Canadair Challenger TR 5-262, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601-5	Before the accumulation of 8,000 total flight cycles
Model CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/Ns 5001 through 5194 inclusive with inboard flaps having greater than 7,400 total flight cycles but equal to or less than 14,850 total flight cycles as of the effective date of this AD	57-40-00-101	Canadair Challenger TR 5-276, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601A-5	Within 500 flight cycles after the effective date of this AD, but not later than 15,100 total flight cycles



<b>Affected Airplanes</b>	<b>Task Number</b>	<b>Canadair Service Information</b>	<b>Initial Compliance Time</b>
Model CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/Ns 5001 through 5194 inclusive, with inboard flaps having greater than 14,850 total flight cycles as of the effective date of this AD	57-40-00-101	Canadair Challenger TR 5-276, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601A-5	Within 250 flight cycles
Model CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/Ns 5001 through 5194 inclusive, with inboard flaps having equal to or less than 7,400 total flight cycles as of the effective date of this AD	57-40-00-101	Canadair Challenger TR 5-276, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601A-5	Before the accumulation of 7,900 total flight cycles
Model CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/Ns 5001 through 5194 inclusive, with outboard flaps having greater than 7,500 total flight cycles but equal to or less than 11,350 total flight cycles as of the effective date of this AD	57-40-00-174	Canadair Challenger TR 5-276, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601A-5	Within 500 flight cycles after the effective date of this AD, but no later than 11,600 total flight cycles.

<b>Affected Airplanes</b>	<b>Task Number</b>	<b>Canadair Service Information</b>	<b>Initial Compliance Time</b>
Model CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/Ns 5001 through 5194 inclusive, with outboard flaps having greater than 11,350 total flight cycles as of the effective date of this AD	57-40-00-174	Canadair Challenger TR 5-276, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601A-5	Within 250 flight cycles after the effective date of this AD
Model CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/Ns 5001 through 5194 inclusive, with outboard flaps having equal to or less than 7,500 total flight cycles as of the effective date of this AD	57-40-00-174	Canadair Challenger TR 5-276, dated July 8, 2013, of the Canadair Challenger TLMC Manual, PSP 601A-5	Before the accumulation of 8,000 total flight cycles
Model CL-600-2B16 (CL-604 Variant) airplanes with inboard and outboard flaps	57-50-00-121	Section 5-10-30 of Part 2, "Airworthiness Limitations," of Bombardier CL-604 TLMC Manual, Revision 8, dated July 8, 2013	Before the accumulation of 7,800 total flight cycles, or within 500 flight cycles after the effective date of this AD, whichever occurs later
Model CL-600-2B16 (CL-604 Variant) airplanes, S/Ns 5301 through 5665 inclusive	57-52-01-102	Section 5-10-30 of Part 2, "Airworthiness Limitations," of Bombardier CL-604 TLMC Manual, Revision 8, dated July 8, 2013	At the time specified in the task

<b>Affected Airplanes</b>	<b>Task Number</b>	<b>Canadair Service Information</b>	<b>Initial Compliance Time</b>
Model CL-600-2B16 (CL-604 Variant) airplanes, S/Ns 5701 through 5953 inclusive	57-50-00-121 and 57-52-01-102	Section 5-10-30 of Part 2, "Airworthiness Limitations," of Bombardier CL-605 TLMC Manual, Revision 8, dated July 8, 2013	At the applicable time specified in the tasks

**(h) Lug Edge Measurement and Inspection**

At the applicable times specified in table 2 to paragraphs (h) and (i)(1) of this AD, measure the forward lug edge distance of all flap hinge boxes, in accordance with the applicable service bulletin specified in paragraphs (h) and (i)(1) of this AD; and do a general visual inspection for cracking and damage (i.e., deformation or bearing failure) of the forward lug edge of all flap hinge boxes.

**Table 2 to Paragraphs (h) and (i)(1) of this AD – Compliance Times for Lug Edge Measurement and Inspection**

<b>Airplane Models</b>	<b>Affected Flaps</b>	<b>Compliance Time</b>	<b>Service Information</b>
Model CL-600-1A11 (CL-600) airplanes having S/N 1004 through 1085 inclusive	Inboard flaps having less than or equal to 7,400 total flight cycles as of the effective date of this AD	Before the accumulation of 7,900 total flight cycles, or within 48 months after the effective date of this AD, whichever occurs first	Bombardier Service Bulletin 600-0762, dated September 26, 2013
Model CL-600-1A11 (CL-600) airplanes having S/N 1004 through 1085 inclusive	Inboard flaps having greater than 7,400 total flight cycles, but equal to or less than 14,850 total flight cycles as of the effective date of this AD	Before the accumulation of 15,100 total flight cycles, or within 500 flight cycles or 48 months after the effective date of this AD; whichever occurs first	Bombardier Service Bulletin 600-0762, dated September 26, 2013
Model CL-600-1A11 (CL-600) airplanes having S/N 1004 through 1085 inclusive	Inboard flaps having greater than 14,850 total flight cycles as of the effective date of this AD	Within 250 flight cycles or 48 months after the effective date of this AD, whichever occurs first.	Bombardier Service Bulletin 600-0762, dated September 26, 2013
Model CL-600-1A11 (CL-600) airplanes having S/N 1004 through 1085 inclusive	Outboard flaps having equal to or less than 7,500 total flight cycles as of the effective date of this AD	Before the accumulation of 8,000 total flight cycles, or within 48 months after the effective date of this AD, whichever occurs first.	Bombardier Service Bulletin 600-0762, dated September 26, 2013

<b>Airplane Models</b>	<b>Affected Flaps</b>	<b>Compliance Time</b>	<b>Service Information</b>
Model CL-600-1A11 (CL-600) airplanes having S/N 1004 through 1085 inclusive	Outboard flaps having greater than 7,500 total flight cycles but less than or equal to 11,350 total flight cycles as of the effective date of this AD	Within 500 flight cycles or 48 months after the effective date of this AD, whichever occurs first; but not exceeding 11,600 total flight cycles	Bombardier Service Bulletin 600-0762, dated September 26, 2013
Model CL-600-1A11 (CL-600) airplanes having S/N 1004 through 1085 inclusive	Outboard flaps having greater than 11,350 total flight cycles as of the effective date of this AD	Within 250 flight cycles or within 48 months after the effective date of this AD, whichever occurs first.	Bombardier Service Bulletin 600-0762, dated September 26, 2013
Model CL-600-2A12 (CL-601 Variant) and CL-600-2B16 (CL-601-3A and -3R Variants) airplanes having S/N 3001 through 3066 inclusive, and 5001 through 5194 inclusive	Inboard flaps having less than or equal to 7,400 total flight cycles as of the effective date of this AD	Before the accumulation of 7,900 total flight cycles, or within 48 months after the effective date of this AD, whichever occurs first	Bombardier Service Bulletin 601-0631, dated September 26, 2013
Model CL-600-2A12 (CL-601 Variant) and CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/N 3001 through 3066 inclusive, and 5001 through 5194 inclusive	Inboard flaps having greater than 7,400 total flight cycles, but equal to or less than 14,850 total flight cycles, as of the effective date of this AD	Within 500 flight cycles or within 48 months after the effective date of this AD, whichever occurs first; but not exceeding 15,100 total flight cycles.	Bombardier Service Bulletin 601-0631, dated September 26, 2013

<b>Airplane Models</b>	<b>Affected Flaps</b>	<b>Compliance Time</b>	<b>Service Information</b>
Model CL-600-2A12 (CL-601 Variant) and CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/N 3001 through 3066 inclusive, and 5001 through 5194 inclusive	Inboard flaps having greater than 14,850 total flight cycles as of the effective date of this AD	Within 250 flight cycles or within 48 months after the effective date of this AD, whichever occurs first.	Bombardier Service Bulletin 601-0631, dated September 26, 2013
Model CL-600-2A12 (CL-601 Variant) and CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/N 3001 through 3066 inclusive, and 5001 through 5194 inclusive	Outboard flaps having less than or equal to 7,500 total flight cycles as of the effective date of this AD	Before the accumulation of 8,000 total flight cycles, or within 48 months after the effective date of this AD, whichever occurs first.	Bombardier Service Bulletin 601-0631, dated September 26, 2013
Model CL-600-2A12 (CL-601 Variant) and CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/N 3001 through 3066 inclusive, and 5001 through 5194 inclusive	Outboard flaps having greater than 7,500 total flight cycles, but equal to or less than 11,350 total flight cycles, as of the effective date of this AD	Within 500 flight cycles or within 48 months after the effective date of this AD; but not exceeding 11,600 total flight cycles.	Bombardier Service Bulletin 601-0631, dated September 26, 2013

<b>Airplane Models</b>	<b>Affected Flaps</b>	<b>Compliance Time</b>	<b>Service Information</b>
Model CL-600-2A12 (CL-601 Variant) and CL-600-2B16 (CL-601-3A and -3R Variant) airplanes having S/N 3001 through 3066 inclusive, and 5001 through 5194 inclusive	Outboard flaps having greater than 11,350 total flight cycles as of the effective date of this AD	Within 250 flight cycles or 48 months after the effective date of this AD, whichever occurs first.	Bombardier Service Bulletin 601-0631, dated September 26, 2013
Model CL-600-2B16 (CL-604 Variant) airplanes having S/Ns 5301 through 5665 inclusive	Outboard and inboard flaps	Before the accumulation of 7,800 total flight cycles or within 48 months after the effective date of this AD, whichever occurs first.	Bombardier Service Bulletin 604-57-007, dated October 2, 2013
Model CL-600-2B16 (CL-604 Variant) airplanes having S/Ns 5701 through 5953 inclusive	Outboard and inboard flaps	Before the accumulation of 7,800 total flight cycles or within 48 months after the effective date of this AD, whichever occurs first.	Bombardier Service Bulletin 605-57-005, dated November 15, 2013

**(i) Corrective Actions**

(1) If, during the measurement required by paragraph (h) of this AD, the lug edge distance is equal to or greater than the limit specified in the applicable service bulletin specified in table 2 to paragraphs (h) and (i)(1) of this AD, no further action is required by this paragraph.

(2) If, during the measurement required by paragraph (h) of this AD, the lug edge distance is below the limit specified in the applicable service bulletin specified in table 3 to paragraphs (h) and (i)(1) of this AD, before further flight, repair using a method approved by the Manager, New York ACO, ANE-170, Engine and Propeller Directorate, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(3) If, during the inspection required by paragraph (h) of this AD, any cracking or damage is found, before further flight, repair using a method approved by the Manager, New York ACO, ANE-170, Engine and Propeller Directorate, FAA; or TCCA; or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(j) No Alternative Actions or Intervals**

After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (k) of this AD.

**(k) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, New York ACO, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send



your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, Engine and Propeller Directorate, FAA; or TCCA; or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(I) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2014-01, dated January 3, 2014, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0491.

(2) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on July 23, 2014.

**John P. Piccola,**

*Acting Manager,*

*Transport Airplane Directorate,*

*Aircraft Certification Service.*

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